


A NEW SPHAGNUM FROM HIGH ALTITUDE COSTA RICA

Sphagnum sancto-josephense Crum & Crosby, sp. nov.

Planta ± tenea, mollis, pallens. Epidermis caulina stratis 2 composita, a cylindro lignoso distincte diversa. Folia caulina ca. 1.4 mm longa, oblongo-ovata, acuta, ad apicem dorso superficie fibrosa; limbus deorsum non dilatatus. Folia ramulina 1.7–1.8 mm longa, anguste lanceolata, madida concava, sica ± plana et valde undulata, fibrosa, dorso superficie pori pauci (2–3) et parvi, in angulis, atque interiore superficie pori multi (4–11), ± magni, rotundi; cellularae chlorophylliferae sectione transversali triangulae, interiore folii superficie inclusae.

Plants rather slender, in soft, loose, pale, yellowish-green tufts; terminal bud not noticeably differentiated; young pendent branches not in pairs. Stems yellowish; cortical cells moderately enlarged, thin-walled, in 2 layers, elongate-rectangular (3–4:1) in surface view, without pores or fibrils; wood cylinder yellowish.
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Stem leaves ca. 1.4 mm long, somewhat concave, oblong-ovate, acute, not noticeably bordered; hyaline cells undivided, without membrane pleats, mostly resorbed on the inner surface, with fibrils and occasional end pores near the apex on the outer surface. Branches in fascicles of 4–5, with 2 or 3 spreading; cortex in 1 layer, the retort cells often 1 above the other, moderately large, with rather inconspicuous necks. Branch leaves flat and wavy when dry, concave, 5-ranked, and narrowly lanceolate when moist, 1.7–1.8 mm long, narrowly bordered by several rows of linear cells and entire except at the narrowly truncate apex; hyaline cells linear-rhomboidal, fibrillose, on the inner surface somewhat convex, with numerous (4–11), rather large and conspicuous, rounded pores with thin margins along the commissures (similar in size, number, and distribution throughout the leaf), on the outer surface nearly plane, with 2–4 small and inconspicuous, somewhat ringed, rounded or elliptic pores at ends and corners; green cells as seen in cross-section triangular, exposed on the outer surface, not reaching the inner surface, the lumen also triangular. Inflorescences and sporophytes unknown.


This species (of the section Cuspidata) closely resembles Sphagnum recurvum P.-Beauv., and its numerous relatives because of leaves flattened and wavy at the margins when dry. A difference of basic importance is provided by the abundance of large, rounded pores on the inner surface of hyaline cells of branch leaves, easily discernible even on light staining. The fairly large, concave, acute stem leaves are distinctive too. The fact that the young pendent branches, as viewed between the rays of the capitulum, do not seem paired aids in distinguishing this from the S. recurvum group in the field.—Howard Crum, Herbarium, University of Michigan, Ann Arbor, Michigan 48104 and Marshall R. Crosby, Missouri Botanical Garden.

REDUCTION OF BOSLERIA (SOLANACEAE)

Perhaps prompted by the occurrence of another endemic solanaceous genus in the region, Orygetes S. Wats., Aven Nelson described a puzzling collection as Bosleria nevadensis A. Nels. (Proc. Biol. Soc. Washington 18: 175. 1905). Examination of the type collection, G. H. True 761 (RM) from Pyramid Lake, Washoe Co., Nevada, 9 June 1903, reveals it to be Solanum sarachoides Sendt., a species from the Argentine now naturalized through the northwestern states. The True collection agrees with Nelson’s description. As B. nevadensis is the sole name published in Bosleria and its type species, the generic name Bosleria is a synonym of Solanum.—W. G. D’Arcy, Missouri Botanical Garden.

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